

# Work Order ID 70187

Tuesday, May 31, 2011 9:05:26 AM



Page 1

Item ID: D4006-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Angle

Start Date: 5/31/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 6/3/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

*[Signature]*

Date: 11-05-31

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4006	A								
100		0.00							
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg								
234. 063	Dwg Rev: <i>A</i>								
	Prog Rev: <i>A</i>								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	Memo	0.00							
Quality Control									

1311-5-31

*[Signature]*  
Pho →

1311-5-31

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4006-1 PAR #: N/A Fault Category: Water Jet NCR: (Yes) No DQA: A Date: 11.06.07  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: OK Date: 11/06/07

NCR: <u>70187</u>		WORK ORDER NON-CONFORMANCE (NCR) <u>4/11.93</u>						
DATE	STEP	Description of NC Section A	Corrective Action			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>11/5/31</u>	<u>#100</u>	<u>Found 4th x 7 Pcs with slots / nicks on outside of holes from water jet h.c. machine mal func.</u>	<u>11.05.31</u> <u>Q51042</u>	<u>→ Scrap + Destroy</u> <u>And Repbe m 117392 x 12</u>	<u>11.5.31</u>	<u>5</u> <u>11/5/31</u>	<u>11.05.31</u> <u>Q51042</u>	<u>11/5/31</u>

NOTE: Date &amp; initial all entries

# Work Order ID 70187

Tuesday, May 31, 2011 9:05:26 AM



Page 2

Item ID:	D4006-1	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Angle					
Start Date:	5/31/2011	Start Qty:	10.00		Cust Item ID:	
Required Date:	6/3/2011	Req'd Qty:	10.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00		Sub 11/05/31		17	77		
130  Brake NC Brake NC	Bend as per dwg  Memo	0.00 0.00		SB 11/06/01		17			
150  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				17	0	11/06/02	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 70187**

Tuesday, May 31, 2011 9:05:26 AM



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Item ID: D4006-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Angle

Start Date: 5/31/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 6/3/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

17 BR 11-5-2

170

Identify as per dwg & Stock Location: *C.A*

0.00



Packaging

Memo

0.00

Packaging

*ES 11/06/03 (17)*

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*11/6/79*  
*MF*  
*11-06-03*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Tuesday, May 31, 2011 9:05:36 AM

Page 1

Work Order ID: 70187

Parent Item: D4006-1

Parent Item Name: Angle



Start Date: 5/31/2011

Required Date: 6/3/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP rev A 09.12.18 new issue Prelim EC verified by:DD IPP Rev:B  
10.05.03 as per ECN10-562 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M2024T3S.063

Purchased

No

100

sf

295.0700

1

10

12.



1311-5-31

2024-T3 .063 sheet

Location

Loc Qty

Loc Code

MAT022

295.07

113867

0.19

117018

40.38

117392

254.5

117018

2nd 117392  
Times

12

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries





W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

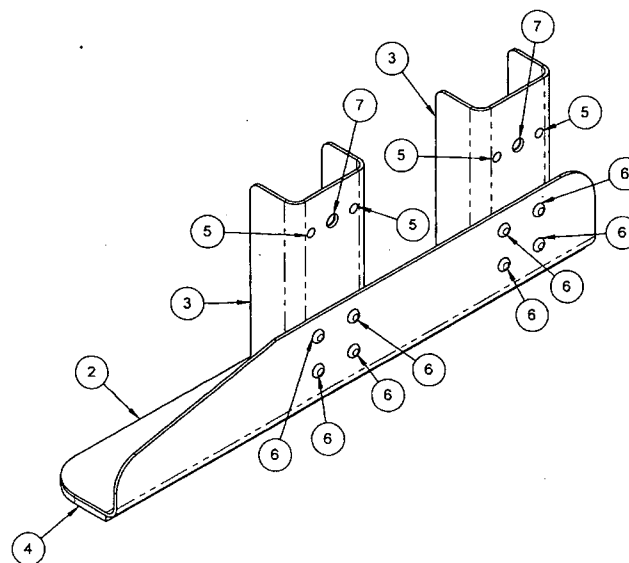
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	D4006-041	TANK TOP SUPPORT ASSEMBLY	JCA-M47-2-01
2	1	D4006-1	ANGLE	
3	2	D4006-3	CHANNEL	
4	1	D4006-5	FOAM	
5	4	MS20426AD3-4	RIVET	
6	8	MS20470AD4	RIVET	
7	2	MS21059-4	ANCHOR NUT	



**D4006-041 TANK TOP SUPPORT ASSEMBLY**

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: POWDER COAT "GREY SANDEXT" (4.3.5.6) PER DART QSI 005 4.3  
BEFORE INSTALLATION OF D4006-5 FOAM AND MS21059-4 ANCHOR NUTS
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4006-041" AND B/N USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.47 lbs

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 70187

*11-05-31*

**RELEASED**  
2010-05-05  
*MD*

A	NEW ISSUE	BY <i>MD</i>	10.02.05
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>MD</i>		
DRAWN	<i>MD</i>		
CHECKED	<i>MD</i>		
MFG. APPR.	<i>MD</i>		
APPROVED	<i>MD</i>		
DE APPR.	<i>MD</i>		
DATE	10.02.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		DRAWING NO. <b>D4006</b> .REV. A SHEET 1 OF 6	
TITLE <b>UPPER RESTRAINT</b>		SCALE NTS	
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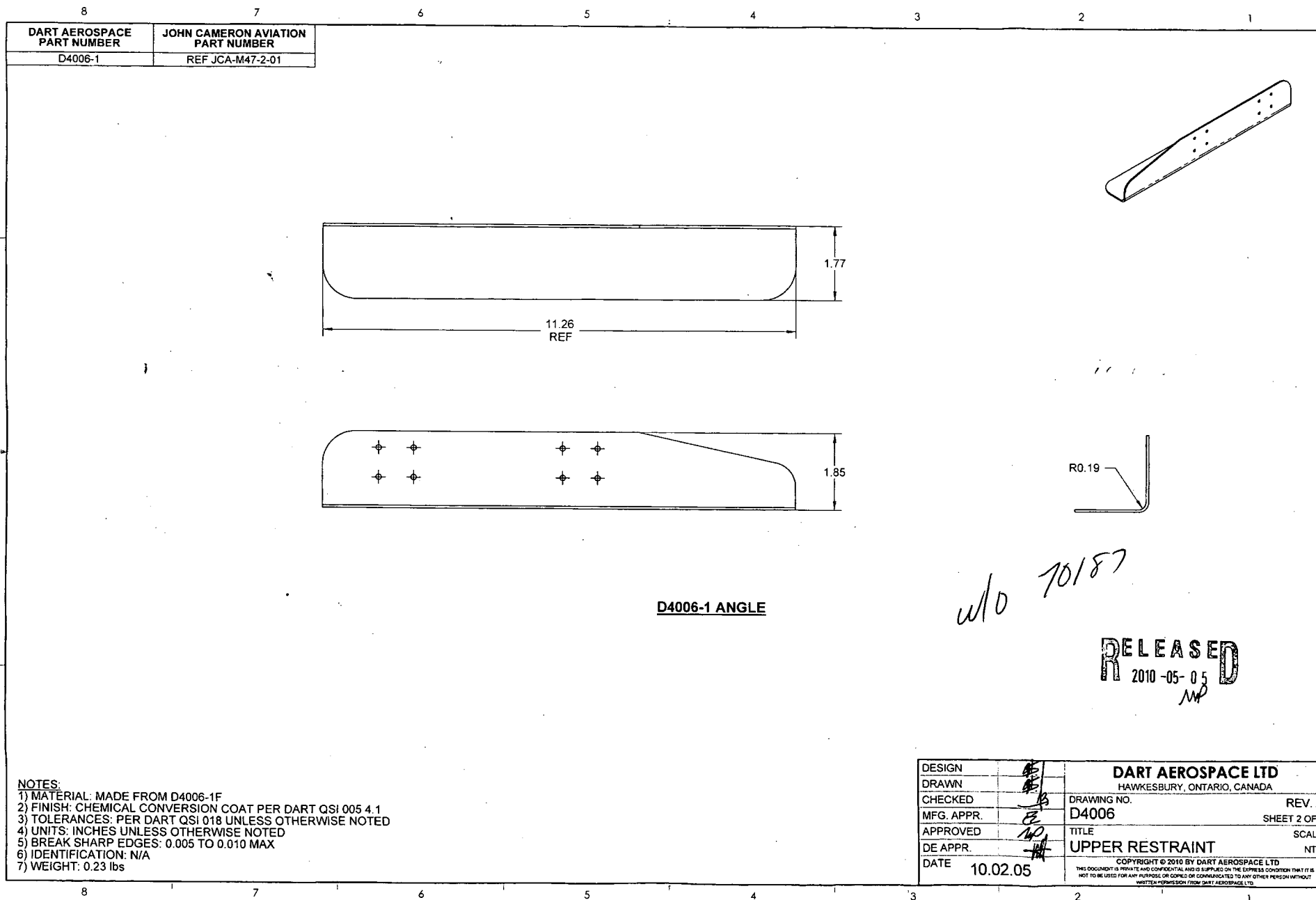
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries



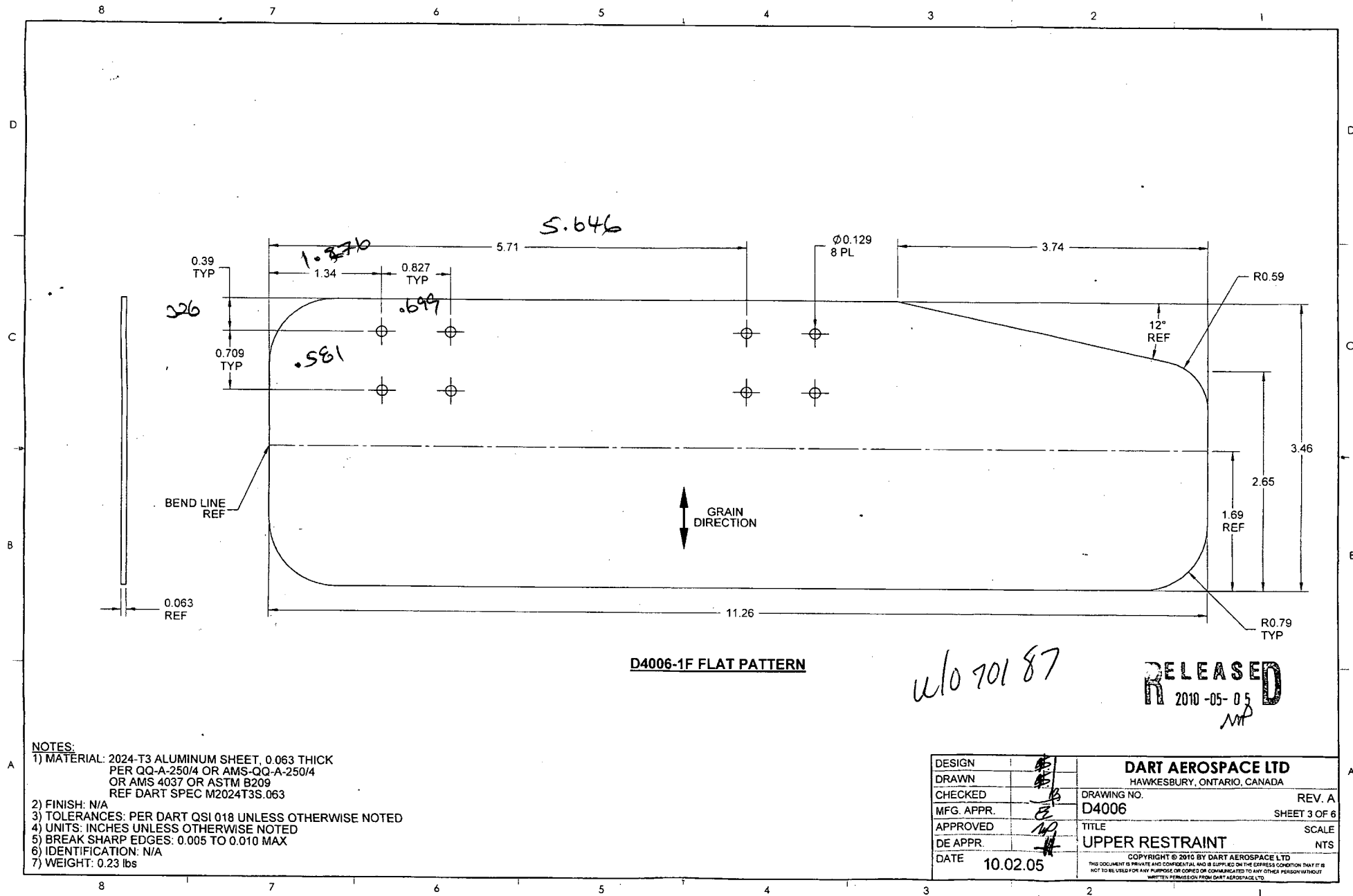
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

**NOTE:** Date & initial all entries



**D4006-1F FLAT PATTERN**

*w/0 701 87*

**RELEASED**  
 2010-05-05  
*MP*

**NOTES:**

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.063 THICK  
 PER QQ-A-250/4 OR AMS-QQ-A-250/4  
 OR AMS 4037 OR ASTM B209  
 REF DART SPEC M2024T3S.063
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.23 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D4006</b>	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		<b>UPPER RESTRAINT</b>	NTS
DATE	10.02.05	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD          THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS          NOT TO BE USED FOR ANY PURPOSE OR CORP'D OR COMMUNICATED TO ANY OTHER PERSON WITHOUT          WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

**NOTE:** Date & initial all entries